



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,811	01/29/2004	Alexander V. Drynkin	5092	5550
7590	12/20/2005		EXAMINER	
			BRAHAN, THOMAS J	
			ART UNIT	PAPER NUMBER
			3654	
DATE MAILED: 12/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/767,811	DRYNKIN ET AL.	
	Examiner Thomas J. Braham	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 November 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

Art Unit: 3654

1. The following is a quotation of the second paragraph of 35 U.S.C. § 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.
2. Claims 2-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For example:
 - a. In claim 2, line 5, the term "standard tube racks" renders the claims indefinite, as it is unclear as to what would or would not be considered as standard. It also appears as though the structure of a standard rack could vary over time.
 - b. In claim 3, the limitation "typically for sorting" fails to positively recite the sorting.
 - c. In claim 4, the limitation "typically when transferring to another adjacent robotic tube handler" fails to positively recite the transferring or the adjacent handler. It is unclear as to how claims 3 and 4 differ.
 - d. Claim 8 fails to include a structural limitation. It only recites the quality of the picking head as being replaceable. Everything, inherently, is replaceable.
3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.
4. Claims 2-6 and 8, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamakawa et al in view of Stevens. Yamakawa et al shows the basic claimed robotic tube handler with an X, Y, Z transport system, but varies from the claims by not showing the details of the cross beam (shifting means 15) as to have it supported at both ends. Stevens teaches supporting the cross beams at each end to prevent distortion, see column 12, lines 40-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Yamakawa et al by supporting the cross beam (15) at both ends, to prevent distortion, as taught by

Art Unit: 3654

Stevens. Yamakawa et al includes additional tube holders (7 and 9) as recited in claims 3 and 4, and tube bar code readers (13a and 13b), recited in claims 5 and 6. The pick head is replaceable, as functionally recited in claim 8.

5. Claims 2-4, 8 and 10, as best understood, are rejected under 35 U.S.C. § 1-3 (a) as being unpatentable over Boje et al in view of Stevens. Boje et al shows a robotic tube handler system comprising a robotic tube handler having a housing with a perimeter rectangular frame having sides (28), a bed (chains 54; note no structure is recited for the bed) in the perimeter frame for orthogonal placement of tube racks, the bed having a seating structure (64) in which standard tube racks seat in a predetermined array and a tube pick-up mechanism (34). The tube pickup mechanism of Boje et al is an X, Y, Z transport unit, but Boje et al varies from the claims by not showing the specifics of the mechanism as to have its crossbeam supported at both ends. However this is conventional. Stevens shows a similar transport unit with its elevator carriage unit supported on a cross beam (160) which is supported on both ends to avoid distortion, see column 12, lines 40-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handler of Boje et al by having the moving cross beam supported at both ends, to prevent distortion of the cross beams, as taught by Stevens. Boje et al has tube housing (38), as recited in claims 3 and 4. The pickup head of Boje et al is replaceable, as recited in claim 8. Boje et al has a tray bar code reader (78), as recited in claim 10.

6. Claim 7, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamakawa et al in view of Stevens, as applied above to claim 5, and further in view of Hardgrave et al. Yamakawa et al, as modified, shows the basic claimed robotic tube handler, but varies from claim 7 by using a bar code reader instead of a RFID reader for identifying the tubes. Hardgrave et al shows a similar identification system and teaches that bar code readers and RFID readers are equivalents, see the first paragraph of the summary of the invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handler of Yamakawa et al by substituting a RFID reader for the bar code reader, as these are art recognized equivalents, as taught by Hardgrave et al.

7. Claim 9, as best understood, is are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamakawa et al in view of Stevens, as applied to claim 2 above, and further in view of Covert et al. Yamakawa et al, as modified, shows the basic claimed robotic tube handler with an X, Y, Z transport system, but varies from claim 9 by not having four fingers on the tube pick head. Covert et al shows a tube gripper with four fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Yamakawa et al by

Art Unit: 3654

forming its pick head with four fingers, as to grip four sides of the tube for better engagement, as taught by Covert et al.

8. Claim 9, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Boje et al in view of Stevens, as applied to claim 2 above, and further in view of Covert et al. Boje et al, as modified, shows the basic claimed robotic tube handler with an X, Y, Z transport system, but varies from claim 9 by not showing the details of the tube pick head as to have it formed with four fingers. Covert et al shows a tube gripper with four fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Boje et al by forming its pick head with four fingers, as to grip four sides of the tube for better engagement, as taught by Covert et al.

9. Claims 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamakawa et al in view of Covert et al. Yamakawa et al shows the basic claimed robotic tube handler with an X, Y, Z transport system, but varies from claim 11 by not showing four fingers on the tube pick head. Covert et al shows a tube gripper with four fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Yamakawa et al by forming its pick head with four fingers, as to grip four sides of the tube for better engagement, as taught by Covert et al. The fingers of Covert et al are considered as slender, as recited in claim 12.

10. Claims 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boje et al in view of Covert et al. Boje et al shows the basic claimed robotic tube handler with an X, Y, Z transport system, but varies from claim 11 by not showing the details of the tube pick head as to have it formed with four fingers. Covert et al shows a tube gripper with four fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Boje et al by forming its pick head with four fingers, as to grip four sides of the tube for better engagement, as taught by Covert et al. The fingers of Covert et al are considered as slender, as recited in claim 12,

11. Claims 13-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamakawa et al in view of Covert et al, as applied above to claim 11, and further in view of Stevens. Yamakawa et al, as modified, shows the basic claimed robotic tube handler, but varies from claim 13 by not showing the details of the cross beam (shifting means 15) as to have it supported at both ends. Stevens teaches supporting the cross beams at each end to prevent distortion, see column 12, lines 40-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Yamakawa et al by supporting the cross beam (15) at both ends, to

Art Unit: 3654

prevent distortion, as taught by Stevens. The fingers of Covert et al are spring and solenoid operated as recited in claims 16-18.

12. Claims 13-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boje et al in view of Covert et al, as applied above to claim 11, and further in view of Stevens. Boje et al, as modified, shows the basic claimed robotic tube handler, but varies from claim 13 by not showing the details of the cross beam (shifting means 15) as to have it supported at both ends. Stevens teaches supporting the cross beams at each end to prevent distortion, see column 12, lines 40-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the robotic tube handling system of Boje et al by supporting the cross beam (15) at both ends, to prevent distortion, as taught by Stevens. The fingers of Covert et al are spring and solenoid operated as recited in claims 16-18.

13. Applicant's remarks in the amendment filed November 11, 2005, have been fully considered, but are deemed moot in view of the above new rejections. The amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The new fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Thomas J. Brahan
Primary Examiner
Art Unit 3654